

**COCA Call:** Leveraging the Electronic Health Record for Public Health Alerting.

**Date/Time:** June 22, 2010 (1:00 PM- 2:00 PM ET)

**Speakers:** Nedra Garrett, MS Acting Director, Division of Informatics Practice, Policy and Coordination (CDC)

Coordinator: Good morning and thank you all for standing by. At this time all participants are in a listen-only mode. After the presentation we will conduct a question and answer session. To ask a question, you'll be asked to press star 1 and record your name. Today's conference is being recorded; if you have any objections you may disconnect at this time.

I'll now turn the meeting over to Ms. Loretta Jackson-Brown; you may begin.

Loretta Jackson-Brown: Thank you (Lou). Good afternoon. I'm Loretta Jackson-Brown and I am representing the Clinician Outreach and Communication Activity, COCA, with the Emergency Communication System at the Centers for Disease Control and Prevention. I am delighted to welcome you to today's COCA conference call, Leveraging the Electronic Health Record for Public Health Alerting.

We are pleased to have with us today Nedra Garrett, Acting Director, Division of Informatics Practice, Policy and Coordination in the Public Health Informatics and Technology program office at Centers for Disease Control and Prevention. She's here to discuss the role of Electronic Health Record Systems in improving dissemination of public health information at point of care.

Leveraging the Electronic Health Record for Public Health Alerting

Tuesday, June 22, 2010 1-2 PM (ET)

During today's call, you will hear the presenter referring to slides in her PowerPoint presentation. The PowerPoint slide set is available from our COCA Web site at [emergency.cdc.gov/coca](http://emergency.cdc.gov/coca). Click on Conference Calls; the slide set can be found under the call-in number and call passcode.

The objectives for today's call are: the participants will be able to discuss the public health benefits of Electronic Health Record Systems; identify the types of information in Electronic Health Record Systems that can be leveraged for alerting; describe conditions most suitable for alerting in Electronic Health Record Systems.

Following the presentation, you will have an opportunity to ask our presenter questions. Dialing star 1 will put you into the queue for questions. In compliance with continuing education requirements, all presenters must disclose any financial or other relationship with the manufacturers of commercial products, suppliers of commercial services or commercial supporters as well as any use of an unlabeled product or products under investigational use.

This presentation will not include any discussion of the unlabeled use of a product or products under investigational use. CDC, our planners, and our presenter wishes to disclose they have no financial interest or other relationships with the manufacturers of commercial products, suppliers of commercial services or commercial supporters. There is no commercial support for this presentation.

Today's presenter is Nedra Garrett. As Acting Director of the Division of Informatics Practice, Policy and Coordination, Ms. Garrett is responsible for several programs to include the Public Health Information Network, Health Information Exchanges, Public Health Informatics Center of Excellence, and Public Health Clinical Decision Support.

Leveraging the Electronic Health Record for Public Health Alerting

Tuesday, June 22, 2010 1-2 PM (ET)

She has worked at CDC for 11 years as an Informatics Health Scientist in various areas to include knowledge management, public health in clinical decision support and other activities related to electronic health records. Her work has been aimed at developing methods and techniques for capturing, forming, and disseminating knowledge from electronic health records and using innovative ways to glean knowledge from the massive CDC stores of information.

Prior to coming to CDC, she worked for seven years within the Department of Defense as a system's analyst responsible for the design, development and management of clinical and administrative health information systems in both inpatient and ambulatory care settings. Ms. Garrett has a Master's of Science Degree in Health and Human Performance with an emphasis in Public and Community Health and a Bachelor's of Science degree in Computer Science. She is also a graduate of the Public Health Informatics Fellowship program.

If you're following along on the slides, you should be on Slide 6. At this time please welcome today's presenter Nedra Garrett.

Nedra Garrett: Thank you, Loretta. Thank you for the opportunity to talk about an area of work that has been really exciting for us in terms of being able to take advantage of the wealth of information that electronic health records provide for public health. And so I'll be talking to you about some of the activities that we have currently with being able to leverage those electronic health records for public health alerting.

The agenda for today will be as follows: I'll be presenting to you an overview of our electronic health record alerting project, provide some example public health scenarios and talk about some of the key components of that solution and then discuss with you some of the public health conditions that are

Leveraging the Electronic Health Record for Public Health Alerting

Tuesday, June 22, 2010 1-2 PM (ET)

suitable for this type of alerting and talk a little bit about the public health and clinical value adds for this work and speak about some of the next steps that we are currently planning.

Next slide. Many of you are very familiar with all the efforts around the ERH and meaningful use and the need for electronic health record adoption in both the inpatient and ambulatory setting. And so this provides us a tremendous opportunity to have a lot of information that we didn't have before. And so Health IT and the electronic health record has really fundamentally changed the availability of clinical information and how that information can be used for public health. And it gives us now more timely access to specific information.

It is really availability of it is really a byproduct of standard clinical practice. And the utility of health IT is really dependent upon the availability of this information nationally and globally. And some of the concerns around that, you know, are really around the patient privacy, those things that we had to put provisions around securely to ensure that we are maintaining the privacy and confidentiality of patient information.

And the promotion of these electronic health records has really been pushed by the dollar. There is now money available that incentivizes healthcare providers to take part in this. And so with the changes that are evolving in this health IT landscape, this gets - presents a tremendous opportunity for public health. And so on Slide 9 I would like to talk to you about the objectives of this particular project.

The EHR alerting project, we embarked on it about two years ago. And what we really wanted to do is to demonstrate how a public health agency can generate an alert that has enough information in it that would allow it to be consumed by an electronic health records system. And we wanted to

demonstrate the effectiveness of a public/private collaborative to see how this can be used to advance the practice of public health in a medical setting.

We demonstrated this project at the HIMSS conference in 2009 and we also presented at this most recent HIMSS conference in 2010. But we wanted to determine if the electronic health record, if that data can be leveraged to identify specific patients with risk factors that are related to health condition that's identified in the alert. And we wanted to demonstrate as well how this information can be transmitted and integrated within the clinical workflow because if it can't do that, then we've really missed the mark.

We want to show that it actually can benefit the clinician at the point of care while they're interacting with their patients. So we are -- I'll speak a little bit about that later, but this a pilot that we're actually involved in now. And we want to evaluate the impact using qualitative approaches on clinicians' behavior, if this actually made any difference in their behavior in providing whether it's educational material or doing additional lab tests or any follow-up activity.

On this next slide what we're showing here is a situation that happened with H1N1. And this is demonstrating that clinicians in that target area there are often times bombarded with information from a number of different sources. The slide actually shows at the national level, CDC at the top, then you have the State in the middle. And then the last level you have the healthcare institution. But what this demonstrates is that information in the H1N1 outbreak came from CDC. It was available on the Web site. It was available in MMWR.

The States also had information available on their Web sites. They were adjusting information that we received - that was received from CDC and tailoring it to their states. So that information was also being sent. And there

was also information being sent at the healthcare institution level because at that level is really where if you are getting recommendations on providing certain testing and you don't have the test kits to conduct that, then there needs to be perhaps some additional guidance around that that would be provided to the physician.

And sometimes we found that the information was actually contrary to each other. So that was a bit of a dilemma. And so what we have tried to address in this particular problem - this particular project is this problem of how can providers be alerted of outbreaks relative to the patients at the time of care. And the time of care is really where we're trying to target this.

And so we wanted to look at how do we collect these alerts - how do we store these alerts in a way that allows them to be transferred or exchanged with electronic health records systems. And so we did this using some common standards that are available out there. This particular one we used the HITSP standard T81 which we don't have to, you know, get into, but it's just there just so that you'll know that this one that we were using for information exchange here.

Some of the public health considerations and public health alerting that differs from what normally you would see in a clinical environment. Typically our alerts are more dynamic in nature. There's typically an urgency associated with those. We often times have multiple alerts that may be related to the same problem as was the case with H1N1 there may have been alert on Monday, another one on Wednesday, Thursday, and so forth. The information often times changes because the problem changes, the landscape of the problem changes.

There's often times new cases happening in new places and it makes the information a little more complex than what you would see in a guidance that

might be presented on mammography screenings where it typically doesn't change a whole lot over time, but the alerts with pub - in the public health setting often times change and many of you get the COCA alerts and you'll see often times the same information with just a little bit of a variance that's being presented to address new cases or maybe even some new guidance.

And the scope of the information is a little bit different because you're talking population versus a patient level information, and often times it requires a multi-stakeholder response that involves as I demonstrated before, we have the CDC involvement, we have State, we have local, we have healthcare providers and sometimes we have other federal agencies such as FDA when you're talking about a food recall. It's like with the salmonella with the peanut butter recall.

Next slide. So some of the clinical considerations that we have to take into account with the solution is the different information needs. We have to be aware of very specific information related to the patient. There may be some general guidance that's being provided. There may be some prioritization. There may be a need to provide different information based on whether the patient is pregnant or have any - they may be immunocompromised. But their information may be different. And so what we have to decide too is when we're sending the information if we sent information before, what is really new and what's really different. So that's an important consideration around the information.

And it's also important how the information is presented because one of the problems that we found with alerts and reminders in clinical systems is this whole problem of alert fatigue. So we have to balance that in providing the most relevant information at the right time so that the pat - the physician is not overburdened with information and then over time may ultimately end up ignoring the alert.

And other things that we've talked about is perhaps having something like a public health indicator that will identify the importance of that information for public health. So on the next slide we'll talk about some example scenarios. And on Slide No. 15 is really a demonstration of what the public health - electronic health record alerting flow looks like.

I'll talk about this a little more in detail, but this is just to demonstrate for you that there is a public health agency involved, there's a medical community involved. And then at the public health agency level is really where the focus is on the creation of the alert, identifying what rules are important to include there and that information sitting there in a repository below the line with the medical community is where the interaction happens with the patient and the provider and the information that is being received from public health.

That will be a little clear - more clear to you in just a moment here as I walk through the actual scenario. So this is an example of electronic health record, EHR-friendly version of an alert message. Many of you are familiar with HAN messages. And what we've done here is essentially just extracted out key pieces of information from a health alert that we're able to structure in a way that we can use it for comparing the information in the alert with the information in the patient's record.

And so you see we have here information on the actual event that talks about the outbreak. Then we have the signs and symptoms; here we have cough, fever, chills and congestion. And we may have some demographic information that would be necessary for us to capture and abstract. In this case we're showing that the age is for all categories; gender, all; race, all. And you have a location. And so here you see we've captured the zip code and have the zip codes of the areas that are affected and ability to be able to choose those.



And so the next slide actually just gives an interface on how a public health message would be created. You have here where you can enter in the disease or condition, H1N1. You can put in a title and so forth. And if you go to the next slide, there is some additional information that can be entered around the severity of the alert, the number of cases, where it's happening.

And on Slide 19 it goes on to display here the symptoms, preventative recommendations. And on Slide No. 20 you have some other information that can be entered. This is a list of possible additional questions that may - that a provider might want to ask. They might want to ask whether the patient is a food handler or a daycare worker. In the case of a foodborne outbreak you might want to know that type of information to, you know, make sure that the patient understands the implications of spreading it.

You might want to also note they're immunocompromised. You might want to know also obviously if they're pregnant. Some of this information you would have already in electronic health record that could be automatically presented to the clinician so that it's part of that decision making. But this is just a not - this is to show you how we can add information that would be most relevant to public health in these alerts as well.

And then we have on Slide No. 21 where we're showing how the information is distributed to the medical community. And I'll show you how that happens on - with this scenario to follow on Slide No. 22. In this case we have a patient that presents to a clinic; a 9-year-old healthy child developed a fever, chills, cough and stuffy nose. So they arrive at the urgent care center and the patient is received and their information is entered into the electronic health record.

On Slide No. 23 is where we're showing the reason for the visit or the chief complaint is actually documented. And in this case we see where the chief complaint is entered, where the patient has this fever, chills, cough, that's captured. And in this case the demographic information also be verified.

And on Slide No. 24 is really where behind the scenes what is happening in an anonymous patient profile is then generated from the information that has been entered. And in that anonymous patient profile we are able to capture the information that we're going to need to make a match on the alert. So we've captured here the date, the age, the gender, the chief complaints and the provider zip code as well as the patient zip code. And this is what's allowing us to make the alert more targeted to the patient.

And on Slide No. 25 we have where the profile, the anonymous patient profile is then sent to this alert repository. In Slide 26 we show here where the matching is occurring. So we have information in the alert itself being matched with information that has been received from the electronic health record. And in that we see there's a match on cough, fever, chills, and congestion is being translated here. This is something that I didn't - I'm not really showing, but there is also a process that happens in the background that allows certain concepts to be translated into a standard nomenclature for ease of matching. So in this case stuffy nose has been translated to congestion.

On Slide 27 is where the alert is being downloaded to the electronic health record indicating that there is an alert for the signs and symptoms that are being presented by that patient for H1N1. On Slide No. 28 is that it actually shows you what could be presented to the provider. The full alert is presented with information that I talked about earlier that was entered on the public health side. The information on the actual alert itself with the event information and with recommendations and treatment.

On Slide 29 you see further here where there's information on prevention that can help the patient, that can be used for education material and additional information as I mentioned around the questions that we can now make available to providers to ask.

And on Slide No. 30 is really where the provider is able to click on that alert and get the information summary. And so on Slide No. 31, this is an example of a future state of alerting. I showed you earlier where we had all the lines being - all the informational flows, they were all presented there to a physician, having to discern what information is most current, what information - how do I, you know, reconcile the State information from the CDC information from the healthcare institution level.

So really the problem is not one of technology, it's really one of governance. And it's really trying to reconcile early what information really needs to be presented in that alert and made available to the commission after coordination with the CDC at a national level and State level and at the healthcare institution level.

So there's a process in those lines that you see there of going back and forth at the point where the part of the - the epi part is really happening and the coordination of the messaging and all for that. So you end up with a message that's fitting in the repository that once the provider sees a patient and that information is then sent off to the repository it would be one that's most relevant and specific to the patient where all the other messages would have been - it would have been determined which one was most important or relevant based on the presenting signs and symptoms of the patient.

Some of the public health conditions that are suitable for alerting in electronic health records systems, we have been primarily focused on those that you

have been receiving in the - with the Health Alert Network. The list there is really an example that I've extracted from there that would be appropriate for alerting in electronic health records.

The recommendations for antiviral medication, foodborne diseases, most recently with the potential cases of mumps where if patients are presenting with particular signs, we can actually identify what those chief complaints or those reasons of - for the visit would be and then be able to direct those alerts to patients that are presenting with those symptoms. But this is really just a list of some of the alerts that have been sent out that would be conducive for alerting in this way.

And generally we would need to have some demographic information, some location information, even occupation and travel history as was the case initially with H1N1 and, you know, perhaps even a case, you know, with screening for other areas like TB which falls outside of - maybe falls outside of emergency preparedness. But there are other preventive screens that can also use the same methods that we've used for alerts around the emergency preparedness conditions that we've been identifying.

And so on Slide No. 33 I've actually listed here just some of the public health and clinical value adds; what are some of the value propositions here. And as I started out earlier with talking about the wealth of information that's now available to us, this provides us an opportunity to improve how information is disseminated at the point of care. How can we take the guidance and recommendation that CDC has made available on our Web site? Is it making them a little more directed specifically to the patient at the point of care?

And it's an opportunity to increase the compliance with those recommendations and for public health generally to take advantage of this information that's been afforded to electronic health record systems. This

would become more widely available as we go forward with meaningful use and the mandated adoption of electronic health record systems.

And on Slide No. 34 some of the things that we've been really thinking about here is what are the key indicators of activities associated with the communicating alerts information. How do we measure that contribution back to public health and to the clinical community around, you know, the alert creation, around greater efficiency, more data - well, data reliability, security, so forth, productivity. These are some of the things that we've been thinking about to ensure that the information is relevant and has utility for public health.

And turn to Next Steps. We want to cause the integration of these alerts within an ambulatory setting. As I mentioned, we are actively engaged in a pilot now. And we hope to learn quite a bit on how this actually can be integrated within the workflow. In a real workflow we today have demonstrated this in a, I guess, a controlled environment, but we are in the process of demonstrating it at a facility that has an ambulatory healthcare record.

And we want to evaluate this in looking how it could be extended for other domains. There's a lot of work that's been done in alerting. A lot of alerts and reminders has been implemented to date around immunizations. There's work that's being done at Harvard around their electronic medical records support for public health which really gets to, you know, detecting individual cases of notifiable diseases and being able to present and report to those public health departments automatically.

There's work that's been done in New York around this. And there's a vast array of information in the medical community around screening - preventive screening guidelines, TB, STD. There's other efforts around CDC that we're

involved in around STD and working with AHRQ on some of their guidelines. But there's a lot of areas of work that really make sense for public health to be involved in here and dovetail off of the work that's been done in the medical community around alerts and reminders.

And so with that, that concludes my presentation and so we wanted to leave space here for questions and answers perhaps. Hopefully I can provide you the answers. If I - if not, I'm sure there's someone else - one or some of my colleagues that are on the phone that can do so. So Loretta.

Loretta Jackson-Brown: Thank you, Nedra, for that informative presentation. We will now open the lines for the question and answer session.

Coordinator: Thank you, this is the conference coordinator. If you would like to ask a question, please press star 1 and record your name. To withdraw your request, it's star 2. Our first question will come from Sean Grannis. Your line is open.

Sean Grannis: Hi, Nedra, can you say more about the demonstration project you have underway?

Nedra Garrett: Sure. This is a project where we are engaged with GE Healthcare in one of their customer sites is Chicago - Alliance of Chicago. And what we're doing is taking the alerts around foodborne diseases and (pausing) them in about ten - with about ten different providers and looking at how the alerts can be structured and made specific enough that the - that it fires the rules at the right time so that you're not over-alerting and that we're trying to get the balance just right with that.

But we're working with Alliance of Chicago in conjunction with their public health department for the alert creation itself to see how these actually

integrate to be able to evaluate just how often we need to trigger and how specific the information needs to be or how general the information needs to be. So there's more to come with that. We still have more questions than answers at this point.

Sean Grannis: Thank you.

Coordinator: Our next question will come from (David Daffey).

(David Daffey): Good afternoon, thank you. This is a very challenging thing that you put in front of us here because there's so many different information systems out there that are already in existence. But a huge amount of money has been put forth by the federal government recently to expand the use of EHR. I'm wondering are there any requirements in those grants - are you aware, to have them work with local or State health departments as they develop these new projects at the local level so that we can get involved because we don't know who's working on these things unless the grantor, the CDC, tells us who's receiving money in our region.

Nedra Garrett: Right. And that is a problem that we recognize. And what we're doing now is working with some of the partner organizations like NACCHO and ASTHO because as you said there is a lot of money that is actually going out related to electronic health records, meaningful use. We've got, you know, those population managers that we're having to address to make sure that we can, you know, transmit information between, you know, for electronic lab reporting and syndromic and surveillance and immunizations.

And so that's something that we're aware of and we are trying to address that by working with a lot of the partner organizations to help inform and distill some of this information because the landscape has evolved so much over the last year that it is somewhat difficult to keep track of all the different

efforts, where is it making sense to partner. So we are aware and working towards addressing that.

(David Daffey): Great, I can't wait.

Nedra Garrett: And I also wanted to mention that was Sean that asked me the question before. I know Regenstrief has certainly done a lot of work in this area too and they are, you know, take the time to promote their (doc-to-doc) system that is also a system that generates alerts to their providers, I believe by specialty. But again, there's a lot of work in this area and I think that has been a great opportunity for public health to take advantage of these systems now and all this data to be able to help us and understand the population, to be able to intervene, you know, provide appropriate interventions that's using that information. So for us it's very exciting.

Coordinator: Our next question will come from Dr. (Bricker).

(Penny Lur): This is (Penny Lur), from Minneapolis. I am (not) totally (keyed) in your alerts and I don't know -- I work in allergy -- how that would work. However, I have a suggestion to make as you're talking about electronic health records. I see anybody - everybody saying we should have them. I see all the systems that are out there geared towards their own system. So here in Minneapolis we have something called Epic that many hospitals have. The Epic will not match with anything else.

There are many electronic health record systems out there. So if the government would mandate that we have them, I would ask the government to mandate that they would compatible. Can you comment on that please?

Nedra Garrett: Right. That's critical. That's the only way the systems are going to be able to be successful is if they are interoperable. And I don't know if you are familiar



with the efforts around the standards and interoperability at the Office of the National Coordinator out of HHS. That would...

(Penny Lur): Well I'd like to get -- excuse me -- I'd like to get that information.

Nedra Garrett: Okay. You can feel free to contact me. My contact information is on the screen there. But there are a whole flurry of activities around standards to help to - ensuring that the information can be exchanged in appropriate ways not just within a healthcare facility but between healthcare organizations. So if you would like more information on that, you can, you know, send me an email and I would be very glad to follow-up with you.

(Penny Lur) Excuse me. I'm not sure if I have it on the screen. I'm looking at the COCA, that's what you are, right? COCA?

Nedra Garrett: Right. My email is simply ngarrett, N-G-A-R-R-E-T-T at cdc.gov.

(Penny Lur): I'm sorry, N-G-A-R-R...

Nedra Garrett: E-T-T.

(Penny Lur): E-T-T.

Nedra Garrett: At cdc.gov.

(Penny Lur): At cdc.gov. So I like to be in communication with people that will work on the compatibility of health records.

Loretta Jackson-Brown: And this is Loretta Jackson-Brown. I will also add that we will be happy to post that link to our COCA Web site as well so that you will be able to obtain it there and we'll also have Nedra's contact information. And you

can always email us at [coca@cdc.gov](mailto:coca@cdc.gov) and we will be able to get that - your comments to Nedra. And that's C-O-C-A at cdc.gov.

(Penny Lur): Thank you.

Coordinator: Aaron Winslow your line is open.

Aaron Winslow: Good afternoon, enjoyed the presentation, however, from what we've seen, I guess, it's that this is going to be a tough nut to crack to try to provide these timely alerts back to the physicians and have them actually be able to use them and so forth. However, I wish you the best on that. From our standpoint, we have a current chief complaint based syndromic surveillance system which a lot of people have and have found that it would be useful and have run this on a pilot basis to be able to directly then access medical records and be able to go in from a public health side, compare, drill down into those medical records.

And along the line of some of the other comments, are there going to be more of a national push to standardize some of that to allow public health access into the medical records for other health surveillance uses? We see the greater benefits coming from that direction.

Nedra Garrett: Right, because as you know with meaningful use that's one of the things that public health is on the hook for, for the exchange of syndromic surveillance information. And...

Aaron Winslow: Not just the syndromic surveillance, I mean public health access into the medical records on a standardized basis. Is that being nationally coordinated right now?

Nedra Garrett: That direct public health access into the electronic health records?

Aaron Winslow: Yes.

Nedra Garrett: I cannot say for sure. I need to follow-up on that. But from all of the conversations that I've been in, I haven't really heard of that being one of the pushes out front, but more about, you know, interacting and allowing the exchange of information. If it can be - if you can identify the information need and then allow, you know, have standards in place that allows you to exchange that information back and forth, then that's really been, you know, the whole focus of, you know, the public health clinical connection, but direct access into, I think public health will have a lot of hoops to jump through to make that happen.

But I can, you know, certainly take your name or you contact me and I can follow-up with you on that later.

Aaron Winslow: Sure. I can follow-up again. Like I said, we've landed on a pilot process here in a couple of cities in Missouri -- I'm from Missouri Department of Health. And it seemed to be very useful for our needs. So that's why I was throwing it out there, but I'll follow-up with an email to you later.

Nedra Garrett: Yeah, most of that is not a technical thing, it's more of really again governance and where rules and regulations and sometimes, you know, we get into the whole having to develop SLAs and agreements between partners to allow that to happen. And so I would see that at a State level it would probably be a little bit easier to do than it would be from a federal level going directly into those systems. But...

Aaron Winslow: Sure, and at the local level they had to go through a lot of hoops with the hospitals in - and how those were accessed and their clearances and so forth, but that's why I wondered if that was something that was being looked

at nationally because it would, again, potentially streamline the process, standardize the process instead of each locality and state having to take that approach on one-by-one.

Nedra Garrett: Right. And some of the work at HHS that we've been working with their connect product through NHIN does require these data use agreements to even be able to interact with the other, you know, with another entity. So that's a tough policy area there, but as I said, not technology but more around policy. But we can - I can talk with you more about that and get some additional information and again we can make that available to the audience at large through Loretta. It seems that we certainly have, as I said, we have more questions around this than we have answers, but we are I think moving in the right direction.

Coordinator: Our next question comes from Dr. (Ruth Cooke).

(Ruth Cooke): Yes. Hello.

Coordinator: Yes, your line is open.

(Ruth Cooke): Oh thank you. Yes, I was interested, I'm coming from an Indian health program employment here in California and I definitely can attest to the alert fatigue that we experienced with the H1N1 notices from so many different levels and I can appreciate that this is, you know, marvelous addition for evaluation. Do you have an estimated timeline when this will be actually put to practical use in our communities?

Nedra Garrett: The, as I mentioned, the pilot we are involved in now and we hope by next - by the end of the year to be able to have some results of the pilot and be able to see how we can - how extensible this is to other domains and the portability to other platforms because we are really platform or EHR

independent. And that's why we've put a lot of focus around the use of standards so that as long as you're adhering to a particular standard, then it doesn't matter what system you're utilizing.

So we hope to learn quite a bit from this pilot. We did demonstrate that we can certainly do this, but we want to show the actual implementation within the electronic health record to, you know, make sure the information is presented at the right point of time, at the, you know, most relevant point where it can actually be made useful because we found that just like even with foodborne diseases, some of our BioSense data actually showed that although those - they - the patients may have had presenting signs and symptoms, there are very, very few cases of these - less than 5% of the time where a stool culture is actually done.

And so even simply, you know, where there may be outbreaks in those areas, but even simply presenting an alert or reminder to do a stool culture should help, you know, should help too. So we still, you know, we hope to learn quite a bit from this pilot. So certainly stay tuned and again, you know, feel free to reach out and I'll be glad to, you know, let you know where we are with that and what we learn. And we will be presenting all of our information, you know, on our Web site as well. So we can provide links out to that.

(Ruth Cooke): Great. Do you - just one more question I - do you see that this is a possible mechanism once it's up and going where this may either rather than augment may actually replace reporting disease to a local, county and state level that it goes directly to the CDC?

Nedra Garrett: No, not really. I don't see it as replacing, but I could see where it certainly would be supportive and be an adjunct to it. As I mentioned, some of the work that's being done at Harvard related to their EHR platform, their ESP, it actually does go the next step with reporting to the public health department.

So you could actually see where you could take a solution like this and pair it up with the reporting part of that and be able to have a more complete solution from, you know, detection to notification and then reporting.

(Ruth Cooke): Yeah. Yeah. Well thank you. I appreciate your time.

Nedra Garrett: Sure, thank you.

Coordinator: John McLamb your line is open.

John McLamb: Yes, this is really a follow-up to and I didn't catch the doctor's name from a couple of questions ago and she was inquiring about how she could learn or how we could learn more about the ONC's efforts, initiatives, and health information exchanges and how it might relate to public health. And I just wanted to let everyone know that CDC has a Community of Practice group called InfoLinks. And if you'll go to the CDC's forward slash PHIN Web site and click on Communities, you should be able to find the InfoLinks community.

And this was a Robert Wood Johnson and Public Health Informatics Institute project that started in - I think in 2008. And CDC and a group of experts in the subject matter, gurus from all over the - from public health State, local, from all over the country are involved with this community of practice and there's been some white papers published and there's some other resources there that could prove very valuable to anyone in public health who would like to kind of catch up with speed with what - get up to speed with what's going on with ONC, the initiatives, and how public health is involved.

And we have monthly calls too that they - that we would welcome their membership and participation in. So that's it.

Nedra Garrett: Thank you for bringing that up. That is, yes, John, I'm so glad you brought that up because yes that it - that resource is available to anyone who wants to participate that has a wealth of information as well.

Coordinator: The next question will come from (Myra Woods).

(Myra Woods): Hello, I work in emergency medical services, and all over the nation EMS providers, ambulance providers are converting to electronic health records, of course we have some of the same issues in interoperability that is a challenge yet to be achieved. Certainly what we would hope for initially is to have interoperability with our local hospitals' emergency departments and follow-up primary care providers.

But also as you all work on public health issues and alerting and notification systems through the electronic health records, don't forget emergency medical services because frequently we're on the front line, we often see public health issues first because of - if - particularly if the signs and symptoms of something like foodborne disease are very acute and with rapid onset, then frequently ambulances will be called for and it will go mostly through the emergency department at or - and urgent care centers rather than primary care physicians or hospitals.

So just a word to not forget EMS.

Nedra Garrett: Right. Absolutely. And a lot of the data that we've been looking at preliminarily has been from emergency room departments, so we are very cognizant of that. And the other too in terms of like a - I don't know if you want to broach the subject about personal health records, but anyone can actually access this repository that I actually spoke about in the presentation. As long as you can interact with a standardized way, you can - that information can be tapped so you can even imagine a consumer that is

concerned about some signs and symptoms and they may be presenting with could in fact through an app - through a mobile application send a request there similarly to the repository and if there's information relevant then, you know, they could be advised that there is an outbreak of a particular disease in their area.

So I'm saying that only because there are multiple ways in multiple settings that could take advantage of the same mechanism for, you know, being alerted for conditions of public health importance.

Coordinator: Lisa Swank, your line is open.

Lisa Swank: Yes, I'm a local emergency preparedness coordinator in Maryland, and we have recently been informed that we possibly would have to come up with local plans for our food supply and the security of the food supply. So I see this as really being instrumental in terms of helping locals to track where the food supply sources are coming from and that would become a national issue.

Nedra Garrett: Right. That's a good point.

Man: (That's exactly there).

Nedra Garrett: And we've, like I said before, we've also been working with FDA on food recalls as well as other areas around vaccine adverse event reporting. So I think there's a real natural tie with the FDA around food supply that we can explore here as well.

Coordinator: And at this time I'm showing no other questions.



Loretta Jackson-Brown: Thank you (Lou). On behalf of COCA, I would like to thank everyone for joining us today with a special thank you to our presenter Nedra Garrett. If you have additional questions for today's speaker, please email us at [coca@cdc.gov](mailto:coca@cdc.gov), put Nedra Garrett in the subject line of your email and we will ensure that your email is forwarded to Ms. Garrett for a response.

Again, that email address is C-O-C-A@C-D-C dot G-O-V. The recording of this call and the transcript will be posted to the COCA Web site at [emergency.cdc.gov/coca](http://emergency.cdc.gov/coca) within the next few days. Continuing education credits are available for this call. Those who participated in today's conference call and who would like to receive continuing education credit should complete the online evaluation by July 30, 2010 using course code EC1648. That is E as in echo, C as in Charlie and the numbers 1648.

For those who will complete the online evaluation between July 31, 2010 and July 31, 2011 use course code WD1648. That is W as in Walter, D as in Delta and the numbers 1648. All continuing education credits and contact hours for COCA conference calls are issued online through TCE online, the CDC training and education online system at [www.2.a.cdc.gov](http://www.2.a.cdc.gov/TCE), forward slash, T as in Tango, C as in Charlie, E as in echo online.

Thank you again for being a part of today's COCA conference call. Have a great day.

Coordinator: Thank you, this will conclude today's call, you may go ahead and disconnect.

END